This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1. (Currently Amended) A liquid crystal display device comprising:

a liquid crystal cell forming an image display area;

a driver applying a voltage to said liquid crystal cell; and

an overdrive controller controlling said driver to apply an overdrive voltage that exceeds a targeted pixel value to said liquid crystal cell; wherein said overdrive controller predicts a capacitance value of a pixel at one frame period later when applying a predetermined voltage to the pixel with a certain capacitance value and stores the predicted capacitance value of each pixel and calculates said overdrive voltage based on the predicted capacitance value, wherein the predicted capacitance value accounts for dynamic changes in capacitance resulting from prior applications of voltages to said liquid crystal cell.

2. (Original) The liquid crystal display device according to claim 1, further comprising a memory storing information about a voltage value to be applied for a predetermined capacitance value, wherein said overdrive controller interpolates the information about the voltage value stored in said memory to calculate said overdrive voltage.

3. (Canceled)

4. (Previously Presented) The liquid crystal display device according to claim 1, further comprising a memory storing information about a capacitance value of a pixel that will be reached at one frame period later when applying a predetermined voltage to the pixel with a certain capacitance value, wherein said overdrive controller interpolates the information about the capacitance value stored in said memory to calculate said predicted capacitance value.

5. (Original) The liquid crystal display device according to claim 1, wherein said liquid crystal cell has a nature where a brightness change delays compared with a capacitance change.

6. (Currently Amended) A liquid crystal display device comprising:

a liquid crystal cell displaying an image when a voltage is applied to each pixel having a TFT structure

a driver applying a voltage to each pixel of said liquid crystal cell; and a

controller controlling the driver to apply a voltage that exceeds an applied voltage to said liquid crystal cell when displaying targeted brightness on said liquid crystal cell, wherein said controller comprises voltage calculating means for calculating a voltage to be applied to said liquid crystal cell based on targeted brightness at one refresh cycle later corresponding to a pixel value to be displayed this time and a present capacitance value of the pixel that is predicted in advance, said controller further

comprising:

capacitance predicting means for predicting a capacitance value of the pixel that will be reached after the refresh cycle when applying said voltage calculated by said voltage calculating means to the pixel with the present capacitance value, the predicted capacitance value accounting for dynamic changes in capacitance resulting from prior applications of voltages to said liquid crystal cell; and

storage means for storing said capacitance value predicted by said capacitance predicting means, wherein the voltage calculating means calculates the voltage to be applied and the capacitance predicting means predicts the capacitance value, respectively, based on said capacitance value stored in said storage means.

7. (Canceled)

8. (Original) The liquid crystal display device according to claim 6, further comprising a memory storing information used to obtain a voltage to be applied this time from a present capacitance value and information about a capacitance value where a pixel will reach when applying a predetermined voltage to the pixel with a predetermined capacitance value.

9. (Original) The liquid crystal display device according to claim 8, wherein the information stored in said memory and used to obtain said voltage and the information about said capacitance value are both discrete values obtained by simulation.

10. (Original) The liquid crystal display device according to claim 8, wherein the information stored in said memory and used to obtain said voltage and the information about said capacitance value are both values obtained based on a transition from a static state.

11. (Currently Amended) A liquid crystal display drive circuit comprising:

capacitance predicting means for predicting a capacitance value where each pixel will reach at one refresh cycle later when applying a predetermined voltage for targeted brightness, the predicted capacitance value accounting for dynamic changes in capacitance resulting from prior applications of voltages to said liquid crystal cell;

storage means for storing the predicted capacitance value; and voltage calculating means for calculating a voltage to be applied to each pixel

based on targeted brightness at one refresh cycle later and the stored capacitance value.

12. (Original) The liquid crystal display drive circuit according to claim 11, wherein said capacitance predicting means reads predetermined information from a memory that stores information indicative of a capacitance value obtained at one refresh cycle later when applying a predetermined voltage to a pixel with a certain capacitance value, and interpolates the read information to predict the capacitance value.

13. (Original) The liquid crystal display drive circuit according to claim 11, wherein said voltage calculating means reads predetermined information from a memory that stores information for obtaining a voltage to be applied from certain capacitance value, and

interpolates the read information based on said capacitance value stored in said storage means to calculate the voltage to be applied.

14. (Currently Amended) A method for driving a liquid crystal display, wherein an input pixel value is overdriven to output a modified pixel value, the method comprising the steps of:

predicting a capacitance value where each pixel will reach at one refresh cycle later when applying a predetermined voltage for the input pixel value, the predicted capacitance value accounting for dynamic changes in capacitance resulting from prior applications of voltages to said liquid crystal cell;

storing the predicted capacitance value; and

calculating an overdrive voltage to be applied to each pixel based on an input pixel value at one refresh cycle later and the stored capacitance value.

15. (Original) The method according to claim 14, wherein the overdrive voltage to be applied is calculated using the stored capacitance value as a parameter at a start point and using an input pixel value as targeted brightness at one refresh cycle later.

16. (Currently Amended) A method for driving a liquid crystal display wherein a brightness change delays relative to a capacitance change, the method comprising the steps of:

predicting a capacitance value of each pixel of said liquid crystal display when applying a predetermined voltage, the predicted capacitance value accounting for

dynamic changes in capacitance resulting from prior applications of voltages to said liquid crystal cell;

calculating a voltage exceeding the targeted pixel value based on an input targeted pixel value with using said predicted capacitance value as a parameter; and

supplying a predetermined voltage to said liquid crystal display based on said calculated voltage.

17. (Currently Amended) A program for directing a computer to drive a liquid crystal display device, the program comprising the functions of:

predicting a capacitance value where each pixel will reach at one refresh cycle later when applying a predetermined voltage to the liquid crystal display device, the predicted capacitance value accounting for dynamic changes in capacitance resulting from prior applications of voltages to said liquid crystal cell;

storing the predicted capacitance value in a buffer of the computer; and

calculating a voltage to be applied to each pixel based on a pixel value to be displayed at one refresh cycle later and the stored capacitance value.

18. (New) The liquid crystal display device according to claim 1, wherein said overdrive controller implements a recursive system for estimating the capacitance at one frame period later based on said predetermined voltage to be applied and said certain capacitance value.

19. (New) The method according to claim 14, wherein said predicting step includes implementing recursion for estimating the capacitance at one frame period later based on

said predetermined voltage to be applied and a certain capacitance value.

20. (New) The method according to claim 16, wherein said predicting step includes implementing recursion for estimating the capacitance at one frame period later based on said predetermined voltage to be applied and a certain capacitance value.